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EXAMINER

NELSON, FREDA ANN

ART UNIT

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3628

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/990,842	Applicant(s) MOSKOWITZ ET AL.	
	Examiner FREDA A. NELSON	Art Unit 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-17, 19-25, and 33-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-17, 19-25 and 33-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment received on January 9, 2007 is acknowledged and entered. Claim 1 has been amended. Claims 7, 18, and 26-32 have been cancelled. No claims have been added. Claims 1-6, 8-17, 19-25, and 33-38 are currently pending.

Response to Amendments and Arguments

Applicant's arguments filed January 9, 2007 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicants argument that neither the card nor the secure module 3 of Van De Pavert gathers usage data from a remote apparatus because neither is a sensor to gather a usage of the telephone, e.g., a timer; and the card or the secure module 3 only exchanges data that are already stored in the card. As such, the encryption of Van De Pavert does not disclose or suggest encrypting usage data transmitted between a sensor that gathers usage data and a processor, the examiner respectfully disagrees. Albershofer discloses for capturing momentary travel data of the vehicle the control unit provided on the vehicle may be connected to various sensors such as e.g. spacing sensors, fuel gauges, distance-gone sensors, engine temperature

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sensors etc. Indeed, not only travel data may be obtained via the vehicle but also game data such as e.g. the distance gone by the golf ball from strike to stop. This distance may be established by the distance-gone sensor coupled to the speedo, connecting one of the vehicle wheels (col. 5, lines 29-39; see FIG. 1 [16 and 20]).

In response to applicant's argument that in the verification procedure of Van De Pavert, a card balance is not a usage data because a use of the card has not taken place. A card balance at this stage may reflect previous usage, but the previous usage will not be used as a basis for calculating a current charge, the Examiner asserts that Albershofer discloses each item of equipment 18 is provided with write/read means 20 for the chip card thus making it possible to transfer usage data as well as accounting data between base station 10 and the item of equipment 18, it preferably also being possible to transfer reference data or other operating parameters, accounting tables etc. via the chip card 16 to the item of equipment 18 (col. 4, lines 38-49).

Examiner's Note

Examiner cites particular pages, columns, paragraphs and/or line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed

invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1-2, 8, 13-14, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albershofer (US Patent Number 6,230,081), in view of Van De Pavert (Patent Number 5,914,471).**

As per claims 1, 8, 12, 14 and 33, Albershofer discloses a sensor for gathering usage data from the remote apparatus (col. 3, lines 31-39; col. 5, lines 10-15; see claim 12); and

a processor for processing the gathered usage data and calculating a charge based on the gathered usage data (col. 1, line 29-39; abstract).

Albershofer does not expressly disclose wherein a security system comprises an encryption system for encrypting usage data transmitted between the sensor and the processor.

However, Van De Pavert discloses an invention which relates to the secure storage of cost data in counters of public telephone sets of the type where a caller pays by means of a card, such as a so-called "chip" card and relates to recording usage data in general and cost data in particular for machines through which the purchaser pays by means of a card, such as, e.g., vending machines for sweets or for soft drinks, certain types of parking meters and stamp vending machines wherein the term "card" should be taken to refer to any type of card (or equivalent of a card) which enables the user to make use of the machine in question. Van De Pavert further disclose that here, the card advantageously and illustratively comprises a microprocessor 50 for processing data; memory 40 having a random access memory (RAM) 47 for temporarily storing data, such as usage data; and, optionally, cryptographic circuitry (54) for performing cryptographic operations, e.g., encryption and decryption (col. 15, line 2-18; FIG. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention Albershofer to include the feature of Van De Pavert in order to provide enhanced security (Van De Pavert; col. 4, lines 37-44).

As per claim 2, Albershofer discloses a communications system for transmitting the calculated charge to a central server via a wireless transmission channel (col. 1, lines 40-48).

As per claim 13, Albershofer discloses the system of claim 1, wherein the sensor measures a speed of the apparatus (col. 1, lines 55-61).

As per claim 14, Albershofer discloses wherein the sensor collects data from a GPS system (col. 6, line 66-co1.7, line 2).

2. Claims 3-5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albershofer (US Patent Number 6,230,081), in view of Van De Paved (Patent Number 5,914,471), still in further view of Ando et al. (Patent Number 5,955,970).

As per claims 3-5, Albershofer does not disclose a security system comprising a tamper resistant encasement that encases at least one component of the local data processing system. Dar et al. does not further disclose that the security system comprises an encryption system for encrypting usage data transmitted between the sensor and the processor.

However, Ando et al. disclose that the on-board device must include a security system for protecting monetary data stored therein and ensuring legitimate communication with the stationary device (col. 1, lines 26-30). Ando et al. further disclose that the illegitimate opening of the on-line device can be detected by sensing the removal of crews fastening a circuit board to a case of the on-board device (col. 2, lines 7-9). Ando et al. still further disclose that the switch is connected to a processor of the on-board device to detect the removal of the screws (col. 2, lines 11-13). Ando et

al. further discloses that Detectors 5 and 7 detect a vehicle and set a timing of communication between the on-board device and the stationary device. Gate entrance detector 9 and gate exit detector 10 set a timing of opening and closing the gate (col. 3, lines 30-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Albershofer to include the security system feature of Ando et al. in order to protect the monetary data stored therein the sensor (Ando et al.; col. 1, lines 26-30).

As per claim 15, Albershofer does not disclose that the sensor measures weight placed on the remote apparatus, however it is old and well known that condition responsive indicating systems/sensors are sensitive to touch or weight placed on remote apparatuses. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Albershofer to include the sensor which measures weight in order to avoid intrusion.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Albershofer, in view of Van De Pavert, in further view of Ando et al., still in further view of Force et al. (Patent Number 5,533,123).

As per claim 6, Albershofer does not disclose that that the tamper resistant encasement comprises an epoxy having a signature embedded therein.

However, Force et al. disclose that various encryption schemes have been proposed, such as where a user creates and authenticates a secure digital signature, which is very difficult to forge and thus equally difficult to repudiate (col. 4, lines 16-19). Force et al. does not teach that the encasement comprises an epoxy, however it is old and well known in the computer arts that epoxy is more durable and tougher encasement.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Albershofer include the epoxy encasement to get the advantage of an inexpensive, but durable encasement.

4. **Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Albershofer, in view of Van De Pavert, in further view of Ando et al., still in further view of Force et al., still in further view of Davis et al. (Patent Number 5,844,986).**

As per claim 9, Dar et al. does not disclose that the processor comprises a cryptographic coprocessor.

However, Davis et al. disclose that a cryptographic coprocessor containing the BIOS memory device performs authentication and validation on the BIOS upgrade based on a public/private key protocol wherein the authentication is performed by verifying the digital signature embedded in the BIOS upgrade (abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Dar et al. to include the feature

of Davis et al. in order to prevent an attacker from trying to corrupt the BIOS contents (col. 2, lines 1-7).

5. **Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Albershofer (US Patent Number 6,230,081), in view of Van De Pavert (Patent Number 5,914,471), still in further view of Dar et al. (US PG Pub. 2001/0039509).**

As per claim 10, Albershofer does not disclose the system of claim 1, wherein the charge comprises an insurance cost.

However, Dar et al. disclose the data processor includes a vehicle insurance billing data processor (paragraph [0025]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Albershofer to include the Dar et al. in order to provide a variety of uses for the data.

6. **Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Albershofer et al. in view of Van De Pavert, in further view of Ehrman et al. (US PG Pub. 2001/0037298).**

As per claim 11, Albershofer does not disclose that the charges comprise a rental cost.

7. However, Ehrman et al. disclose that in some instances the results are entered into a hand held computerized recordation device for entry into the agency computer database for calculation of the final rental charge (either while the lessee waits or as a supplement to the original charge on the initially tendered credit card).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Dar et al. to include the feature of Erhman et al. in order to effect payments for vehicle-related services including vehicle rentals (Erhman et al.; paragraph [0002]).

8. Claims 16, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dar et al. in view of Van De Pavert.

As per claims 16 and 23, Dar et al. disclose a system for managing usage information collected on a remote apparatus, comprising:
a central server for receiving information from the remote apparatus, and processing the information to obtain a usage payment (paragraph [0039]);

a local data processing system installed on the remote apparatus (paragraph [0038]), having:

a monitoring system for gathering usage data from the remote apparatus (paragraph [0125]) { without requiring any intervention by the driver, a parking communicator 104, receiving a location input from GPS receiver 102, transmits a message in a wireless manner to a central unit 106, which in turn provides data used for effecting payment for parking};

a processor for managing the usage data (paragraph [0039]) {at least one data processor which provides a billing data output in respect of a vehicle-related service} a communications system for communicating information from the processor to the central server (paragraphs [0038],[0125]).

Dar et al. does not disclose a security system which includes an encryption system.

However, Ando et al. disclose that the on-board device must include a security system for protecting monetary data stored therein and ensuring legitimate communication with the stationary device (col. 1, lines 26-30). Ando et al. further disclose that the illegitimate opening of the on-line device can be detected by sensing the removal of screws fastening a circuit board to a case of the on-board device (col. 2, lines 7-9). Ando et al. further disclose that the switch is connected to a processor of the on-board device to detect the removal of the screws (col. 2, lines 11-13). Ando et al. still further disclose that Detectors 5 and 7 detect a vehicle and set a timing of communication between the on-board device and the stationary device. Gate entrance detector 9 and gate exit detector 10 set a timing of opening and closing the gate (col. 3, lines 30-45).

Therefore, it Would have been obvious to one of ordinary skill in the art at the time the invention was made to. modify the invention of Dar et al. to include the security system feature of Ando et al. in order to protect the monetary data stored therein the sensor (Ando et al.; col. 1, lines 26-30).

As per claim 21, Dar et al. disclose the system of claim 20, wherein the usage payment comprises an insurance payment (paragraph [0025]) {the data processor includes a vehicle insurance billing data processor}.

9. **Claims 17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dar et al. in view of Van De Pavert, in further view of Ando et al. (Patent Number 5,955,970).**

As per claims 17 and 19-20, Dar et al. does not disclose a security system comprising a tamper resistant encasement that encases at least one component of the local data processing system. Dar et al. does not further disclose that the security system comprises an encryption system for encrypting usage data transmitted between the sensor and the processor.

However, Ando et al. disclose that the on-board device must include a security system for protecting monetary data stored therein and ensuring legitimate communication with the stationary device (col. 1, lines 26-30). Ando et al. further disclose that the illegitimate opening of the on-line device can be detected by sensing the removal of screws fastening a circuit board to a case of the on-board device (col. 2, lines 7-9). Ando et al. still further disclose that the switch is connected to a processor of the on-board device to detect the removal of the screws (col. 2, lines 11-13). Ando et al. still further disclose that Detectors 5 and 7 detect a vehicle and set a timing of Communication between the on-board device and the stationary device. Gate entrance detector 9 and gate exit detector 10 set a timing of opening and closing the gate (col. 3, lines 30-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Dar et al. to include the security system feature of Ando et al. in order to protect the monetary data stored therein the sensor (Ando et al.; col. 1, lines 26-30).

10. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dar et al. in view of Van De Pavert, in further view of Ando et al., still in further view of Ehrman et al. (US PG Pub. 2001/0037298).

As per claim 22, Dar et al. disclose that there is also a vehicle-related fee payment system including at least one data processor which provides a billing data output in respect of a vehicle-related use fee which is dependent on the time during which the vehicle is being operated (paragraph [0068]).

Dar et al. does not disclose that the charges comprise a rental cost.

However, Ehrman et al. disclose that in some instances the results are entered into a hand held computerized recordation device for entry into the agency computer database for calculation of the final rental charge (either while the lessee waits or as a supplement to the original charge on the initially tendered credit card).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Dar et al. to include the feature of Ehrman et al. in order to effect payments for vehicle-related services including vehicle rentals (paragraph [0002]).

11. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dar et al. in view of Van De Pavert, in further view of Ando et al. in further view of Ehrman et al. (US PG Pub. 2001/0037298).

As per claims 24-25, Dar et al. does not disclose that the usage payment comprises an insurance or a rental fee.

However, Erhman et al. disclose that the customer enters a selected vehicle, punches in the prompted rental (e.g., rental duration, fuel option, insurance coverage option, return option, etc.) and identification information and, when instructed, swipes a credit Card through the reader to activate the system, with transmission of all the information to the central billing and maintenance data base which transmits details to the checkout gate, where a rental agreement is printed out, when the vehicle arrives at the gate (paragraph 0031).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Dar et al. to include the payment feature of Erhman et al. in order to include in-vehicle check out and payment device operatively linkable to the transmitting sensor of the vehicle (Erhman, abstract).

12. Claims 34-35 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dar et al. in view of Van De Pavert, in further view of Shimizu et al. (US PG Pub. 2002/0111822).

As per claims 34-35, Dar et al. disclose that the data processor includes a Vehicle insurance billing data processor.

Dar et al. does not expressly disclose obtaining an electric payment.

However, Shimizu et al. disclose that and IC card might be used to subtract the beneficiary fee or add the provider compensation shown in FIG. 60 through FIG. 65;

and if employed to subtract beneficiary fees, it would function in the same way as a prepaid card and to add provider compensation, it would be used like a debit card (paragraph [0283]). Shimizu et al. further disclose that if memory medium 5720 could also be used for general purchases (i.e., to pay for other transactions), its utility would be enhanced. If the memory medium does not have the capability of being used to pay for general purchases, it should still be able to be credited or debited in an ATM machine by accessing the information mediator's account and adding or subtracting the amount recorded on the card (paragraph [0283]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Dar et al. to include the feature of Van De Pavert and Shimizu et al. in order to provide the convenience of credit card payments.

As per claims 37-38, Dar et al. do not disclose the method wherein the usage data is encrypted prior to being communicated to the processor. Dar et al. do not further disclose wherein the charge is encrypted prior to being communicated to the server.

However, Shimizu et al. disclose that identity verification, then, is executed as preprocessing (setup) before data can be exchanged with the mediator. In other words, the mediator issues validation (data) 2701 to the machine or device to which it is connected via a network before the contract is in effect and based on these validation data, it can recognize which machine or device is communicating with it in the future wherein validation data 2701 may consist of a recognition code, a string in machine

code used to recognize a machine or device, or they may be a cryptographic key or some other encrypted code (paragraph [0207]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Dar et al. to include the feature of Shimizu et al. in order to provide a secure transfer of information.

13. Claim 36 is rejected under 35 U.S.C, 103(a) as being unpatentable over Dar et in view of Van De Pavert, in further view of Shimizu et al., still in further of Ehrman et al. (US PG Pub. 2001/0037298).

As per claim 36, Dar et al. disclose that there is also a vehicle-related fee payment system including at least one data processor which provides a billing data output in respect of a vehicle-related use fee which is dependent on the time during which the vehicle is being operated (paragraph [0068]).

Dar et al. does not disclose that the charge is a rental cost.

However, Ehrman et al. disclose that in some instances the results are entered into a hand held computerized recordation device for entry into the agency computer database for calculation of the final rental charge (either while the lessee waits or as a supplement to the original charge on the initially tendered credit card).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Dar et al. to include the feature of Erhman et al. in order to include the feature of Erhman et al. in order to effect payments

for vehicle-related services including vehicle rentals (Ehrman et al; paragraph [0002]).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FREDA A. NELSON whose telephone number is (571) 272-7076. The examiner can normally be reached on Monday and Wednesday-Friday, 8:30 AM -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. A. N./
Examiner, Art Unit 3628
03/30/2008

/Janice A. Mooneyham/
Supervisory Patent Examiner, Art Unit 3689